

**TECHNICAL SUPPORT DOCUMENT  
For  
Safford Valley Cotton Growers Cooperative  
Air Quality Control Permit No. 42703**

**I. INTRODUCTION**

Permit No. 42703 is a renewal Class II synthetic minor permit for Air Quality Control Permit No. 1001589 which expired on June 4, 2007. The permit is being issued to Safford Valley Cotton Growers Cooperative, Inc. for operation of the cotton ginning facility located in Safford, Arizona.

**A. Company Information**

1. Name of the Company: Safford Valley Cotton Growers Cooperative, Inc.
2. Mailing Address: P.O. Box 1079  
Safford, AZ 85548
3. Facility Address: 120 E. 9<sup>th</sup> Street  
Safford, AZ 85546

**B. Attainment Classification**

The facility is located in attainment/unclassified area for criteria pollutants.

**C. Learning Sites Evaluation**

In accordance with ADEQ's Environmental Permits and Approvals Near Learning Sites Policy, the Department conducted an evaluation to determine if any nearby learning sites would be adversely impacted by the Safford Valley Cotton Growers Cooperative facility. Learning sites consist of all existing public schools, charter schools and private schools at the K-12 level, and all planned sites for schools approved by the Arizona School Facilities Board. The learning sites policy was established to ensure that the protection of children at learning sites is considered before a permit approval is issued by ADEQ.

The Department identified nine learning sites within two miles of the facility. ADEQ has reviewed the emission estimates for the facility, and has determined that the operation of the facility will not adversely affect the learning sites.

**D. Background Information**

The facility is operating under Class II Air Quality Permit. The first permit was issued in August 1990. The most recent operating permit (Permit No. 1001589) was issued on June 4, 2002.

**II. FACILITY DESCRIPTION**

The facility is a stationary cotton ginning plant, consisting of two gins- one long staple gin, and one short staple gin. Each gin has a processing capacity of 7,500 pounds of lint per hour. The facility has eight (8) natural gas fired heaters, each 3.0 MMBtu/hour. The facility processes the seed cotton for producing short-staple and long-staple cotton in the two gins. The various steps involved in the process are the transportation and feeder system, drying and cleaning systems, two gin lines followed by lint cleaning and pressing systems, and the trash system. The emission control is through the various cyclones. Discharge from all the cyclones is discharged into a dust house.

## DRAFT

### III. COMPLIANCE HISTORY

The facility had 7 (seven) inspections since the 2002. The facility was issued a Notice of Correction on October 30, 2006, related to timely submission of compliance certification. Subsequently, the facility submitted the certification and achieved compliance. The facility is currently in-compliance.

### IV. EMISSIONS

The facility has potential to emit more than 100 tons/year of particulate matter less than 10 microns (PM<sub>10</sub>) emissions, based on 7500 pounds per hour capacity of each line and 8760 hours of operation. However, cotton gins operations are seasonal. The facility has proposed a voluntary operating hour limitation of processing a maximum of 69,000 bales per year. The facility-wide emissions with this synthetic minor limitation are as per the following Table-1:

**Table 1: Facility-wide Emissions**

Pollutant	Heaters	Cotton Gins	Facility-wide Emissions
	tpy	tpy	tpy
CO	8.66		8.66
NO <sub>x</sub>	10.31		10.31
SO <sub>2</sub>	0.06		0.06
PM <sub>10</sub>	0.78	41.4	42.18
VOC	0.57		0.57

### V. APPLICABLE REGULATIONS

**Table 2: Verification of Applicable Regulations**

Unit	Rule	Verification
Cotton Gins including heaters and dryers	A.A.C. R18-2-729	This standard is applicable to cotton ginning operations.
Fugitive dust	A.A.C. R-18-2, Article 6, A.A.C. R18-2-702	This Article is applicable to fugitive dust sources at the facility.
Mobile sources	A.A.C. R-18-2, Article 8	This Article is applicable to off-road mobile sources, which either move while emitting air pollutants or are frequently moved during the course of their utilization.
Abrasive Blasting Operations	A.A.C. R-18-2-726	This standard is applicable to any abrasive blasting operation at the facility.
Spray painting Operations	A.A.C. R-18-2-727	This standard is applicable to any spray painting operation at the facility.
Demolition/renovation Operations	A.A.C. R18-2-1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.

**VI. PREVIOUS PERMIT CONDITIONS**

Table 3 compares the conditions in Permit No. 1001589 with the conditions in this permit and cross-references the previous permit conditions to their location in the new permit.

**Table-3**

<b>Condition # in permit nos. 1001589</b>	<b>Determination</b>				<b>Comments</b>
	Delete	Kept	Revise	Streamline	
Attachment A			x		This Attachment has been revised and most recent Attachment “A” is used for this permit.
Attachment B					
Conditions I.A.1.a		x			This condition for fugitive dust emissions from gins is relocated under Condition II.B.1.c and Section III.
Condition I.A.1.b		x			This condition for particulate matter emission limitation and standards is relocated as II.B.1.a.
Condition I.A.1.c		x			This requirement for opacity standard is renumbered as II.B.1.c.
Condition I.A.1.d	x				This requirement for mass emission testing for alternate opacity limit has been deleted. This procedure was available only till May 15, 2004, and is no longer available.
Condition I.A.2		x			This opacity monitoring and record-keeping requirement for heaters is relocated as Condition II.B.3.
Condition II.B		x			This Condition for fuel limitation is relocated as Condition I.a.1.

**VII. MONITORING REQUIREMENTS**

The Permittee is required to conduct a monthly survey of visible emissions emanating from the cotton gins. If the opacity of the emissions observed appears to exceed the standard, the observer must conduct a certified EPA Reference Method 9 observation. If the observation results in an exceedance of the opacity limit of 40%, the Permittee is required to take appropriate corrective action and keep a record of the corrective action performed.

**VIII. LIST OF ABBREVIATIONS**

A.A.C..... Arizona Administrative Code  
ADEQ..... Arizona Department of Environmental Quality  
AQD..... Air Quality Division  
CO..... Carbon Monoxide  
FERC..... Federal Energy Regulatory Commission  
hr..... Hour

## DRAFT

lb ..... Pound  
MMBtu ..... Million British Thermal Units  
NO<sub>x</sub> ..... Nitrogen Oxide  
PM ..... Particulate Matter  
PM<sub>10</sub>..... Particulate Matter Nominally less than 10 Micrometers  
PTE..... Potential-to-Emit  
SO<sub>2</sub>..... Sulfur Dioxide  
TPY..... Tons per Year  
VOC..... Volatile Organic Compound  
yr..... Year